How can we create a successful human-machine dialogue?



"Overall, I'm optimistic about the future: the new digital technologies have enormous potential to make our lives better, more humane, healthier, and also more democratic and connected. But for this to happen we need science, business, society and politics to create the right framework. In my view, we need to integrate a set of values into the basic design of AI-based systems in order to guarantee respect, correct information, checks and balances and control.

Above all, we must design digitalisation to ensure that humans are active participants. As things stand now, many users simply feel dependent on digital technologies. This is why human interaction with technical systems must be part of the design and development process – right from the start.

More and more often, we are finding ourselves in environments with multiple digital systems. Many of these systems use artificial intelligence and deep neural networks. I might have a smart home system that can identify my "wellness times" and configure itself accordingly, for example. Ensuring that humans are able to sufficiently understand and use these increasingly pervasive digitalised environments despite their complexity is a major challenge.

Nowadays, companies are very keen to tailor their products to the user's requirements. When we look at technological development processes, there is still some way to go before this goal is fully realised. But we'll get there."

Prof. Dr Susanne Boll

Media Informatics and Multimedia Systems